

PERSONAL OBSERVATIONS ON THE USE OF THE FOUR-STATE
ELECTRONIC RANDOM STIMULUS GENERATOR *

The following notes are based solely upon my experience and I therefore make no claim that they are generalizable to other persons. Since I am still learning about ESP phenomena, I am confident that additional work in this area will expand, modify, and refine the perceptual processes discussed below. While I have tried to describe these experiential processes with as much precision as possible, the use of seemingly precise language should not leave the impression that the perceptions themselves were equally precise. To the contrary, I found these perceptions to be delicate, transient and ephemeral--and yet, at the same time--and somewhat surprisingly--unmistakably real.

1. Perceptual Processes

Working with the ESP machine proved to be a venture into unfamiliar perceptual territory which functioned according to new and different rules. It took some time (five hours or so with the ESP machine) to begin to learn not only which perceptual processes would work but, equally important which would not work. There was clearly a learning process in finding those delicate and subtle internal cues that would allow me to make perceptually based choices. After approximately 1000 trials with the ESP machine, five dominant perceptual modes emerged. Subsequent

* Prepared by _____ a policy research analyst at SRI, who was a high-scoring subject ($p < 10^{-6}$) with the four-state electronic random stimulus generator.

work with the machine seemed to essentially expand and refine these perceptual processes that emerged initially.

Direct Knowing (Used approximately 5 to 15 percent of the time)--This perceptual cue came as a "gift" that I did not have to work for. This is not to say that this "cue" was always right, but when there was a direct perception of the appropriate response unmediated by any of the other cues described below, my chances of being right seemed quite high (say 75 percent of the time). Internally, this was simply the feeling that I should push one specific button and the knowing was almost immediate. If it were not immediate then, typically, one of the other cues would be used.

"Closure Cues" (Used perhaps 75 percent of the time)--This cue manifested itself in a variety of ways; a sense of "fullness" with respect to a particular button, an internal anticipation of the bell ringing, a sense of "hardness" or "firmness" and a sense of being "locked into" the correct response. The validity of this cue could be tested by acting and thinking as if I were going to push a particular button and then noting the extent to which these "closure cues" became present. This sense of active intentionality--both physically and psychologically--seems important in that it allowed me to sort out many real from imagined perceptions. Also, this cue often gave a kind of veto power; i.e., it did not necessarily assure me as to the right answer but it would tend to tell me if I had picked the wrong one, i.e., I would not experience the aforementioned cues.

Pattern Recognition (Negligible use initially, but then used approximately 75 percent of the time during Phase IV)--Although I used this perceptual mode very infrequently during the initial stages of the

experiment, it emerged rather naturally toward the end. This was similar to the "direct knowing" but not isolated to a single button; rather, there was a sense of the next two to three buttons that would be the correct responses. These perceptual cues were obtained in a less objective/rational way and in more of a meditative state, highly concentrated but without specific focus on a particular button. Interestingly, in using this perceptual process, I was able to go somewhat faster and have greater access to all of the buttons in an equivalent way (see the second point under Section 2 next page). Thus, this mode had the advantage of loosening habituated perceptual patterns but it also made selections less amenable to conscious control and testing. This process proved to be either highly accurate or highly inaccurate. Accuracy seemed to be a function of the degree to which I could become synchronized with the evolving pattern of machine selected choices--and it was easy to get out of phase/sequence with this pattern.

Rational Guessing (Used approximately 5 percent of the time)--Although I virtually never did try to superimpose some rationally predicted pattern upon the random, machine selection of buttons, I would sometimes temper my selections (very seldom for the better) by noting that one button had come up too often for it to be likely on the next trial or, conversely, it had come up so seldom that it should be given special consideration as a likely possibility on the next trial. Again, although this was a tempting strategy, I found that random processes were not amenable to rational anticipations and my rational guesses seemed often to be wrong.

Tension/Vector Analysis (Used approximately 75 percent of the time)--Here the cue was manifested as a sense of tension(s) pulling in one direction or another with the selection buttons as the locus for that tension. The cue was also manifested as a feeling of "emptiness" and

conversely as a sense of "fullness." To describe this process further, it felt analogous to vector analysis in physics where, in sorting out competing tugs and pulls, one finds the "dominant" vector; i.e., the one with the strongest "pull" or the one that best "balances" the other vector tensions. Figure A-1 illustrates this phenomenon.

Although the tension/vector cues were very useful and among the most reliable of all the cues, I found them to be at times quite misleading. The source of confusion stemmed from the role of time as a variable rather than a constant in extrasensory reality (discussed in more detail under section "Comments on Perceptual Processes"). If my assumptions as to the temporal nature of my perceptions did not fit with the actual nature of those perceptions, then the perceptions were quite misleading. (Recall that precognition refers here to a button that will be selected in the future--typically the next trial). The nine-cell matrix shown in Figure A-2 may clarify the complexity of the perceptual process, the need for discriminating awareness and the possibility for error. Out of nine possible combinations of the assumed/actual nature of perceptions, only three are matched or congruent and yield accurate understandings. Each of these primary cases is discussed below:

- Clairvoyant--Here the feeling which allows sorting and selection is like that described in Figure A-1.
- Precognitive--The feeling, sorting, and selection is like that described in Figure A-1 with clairvoyance; the primary difference being a shift in the time dimension to refer, not to the present target of the machine, but to the one to be selected next. To act on this perception I would press the pass button to bring the future into the present and then press the button that corresponded to my precognitive perceptions.
- Clairvoyant and Precognitive--The perception is of a pattern of buttons, distributed through time, that are and will be selected by the machine--the "pattern" usually consisted of two to three buttons. Again, the time variable was most

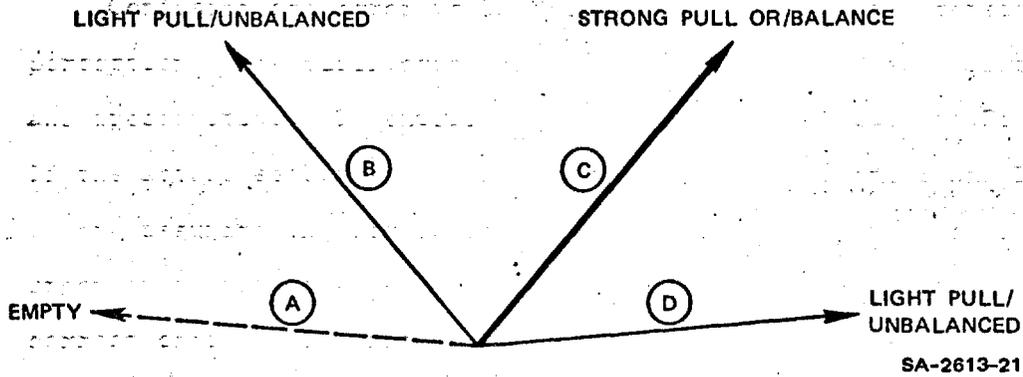


FIGURE A-1 ILLUSTRATION OF TENSION/VECTOR ANALYSIS IN OPERATION
With Button C being the one selected using these cues.

| | | ACTUAL NATURE OF PERCEPTIONS | | |
|-------------------------------------|------------------------------------|---------------------------------|-----------------------|------------------------------------|
| | | Clairvoyant | Precognitive | Clairvoyant and Precognitive |
| ASSUMED NATURE OF PERCEPTIONS | Clairvoyant | Correct Perception | Misperception | Misperception |
| | Precognitive | Misperception | Correct Perception | Misperception |
| | Clairvoyant and Precognitive | Misperception | Misperception | Correct Perception |

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FIGURE A-2 MATRIX SHOWING CORRECT PERCEPTION AND MISPERCEPTION IN THE USE
OF TENSION/VECTOR CUES VIA THE INTERFACE BETWEEN ASSUMED AND
ACTUAL NATURE OF PERCEPTIONS

troublesome--typically with greater difficulty in determining the order in which the buttons would appear as targets and lesser difficulty in determining which buttons were targets.

Confusion and error would arise when I assumed the tension/vector perceptions were clairvoyant when in fact they were (say) clairvoyant and precognitive. To explain how this felt, refer back to Figure A-1. If the actual sequence of correct answers were Buttons B and D, and if I were assuming the perceptions were clairvoyant only, then it was not uncommon to have the perception that the intervening button (C) was the correct choice. The rationale for this perception was that it felt like a balance point between Buttons B (present target) and D (next target).

In retrospect, when I am more rationally aware of the room for error in the use of this cue mechanism, I am somewhat surprised as to how useful it was in operation.

It should be clear from the preceding descriptions that selections were made by a variety of processes which were used sometimes in isolation and oftentimes in combination. A typical sequence in the selection process was: (1) Check for "direct knowing" cues, if not there, then (2) Use "tension/vector" cues, then (3) Make final selection with "closure cues."

2. Comments on Perceptual Processes

Rather than work rapidly, I chose to work deliberately, consciously, and therefore slowly. I would typically take five to thirty seconds to select a button--enough time to have a firm and conscious sense of my internal cues and what I thought they meant. The typical sequence would be as follows:

- Clear mind and become quiet
- Concentrate internal awareness

- Observe various cues
- Rationally interact with cues to sort them out
- Select a button and press it
- Integrate feedback from response
- Clear mind and become quiet.

Except during "pattern recognition," when all buttons seemed equally accessible, I found that the top two buttons on the machine were much more accessible than the bottom two. Three plausible explanations emerge to account for this. First (and least likely I think) is a psychological predisposition against the bottom two buttons--perhaps because of the color of the buttons or because of the pictures associated with the targets. Second is the possibility that the circuitry of the ESP machine in some way favors the top two buttons or obscures the bottom two. Third (and most plausible to me) is the possibility that to the extent I used the "tension/vector" cue, then the bottom two buttons would be without a vector below them--making it more difficult to "bracket" the bottom two buttons with this perceptual process. In later phases of the experiment, I was more able to access the bottom two buttons and this seemed to correspond with increasing use of the "pattern recognition" cues and the decreasing use of tension/vector cues.

The longer I worked with the ESP machine, the more apparent it became that, in an extrasensory perception reality, time becomes fluid. In other words, although the experiment was designed to test clairvoyance (selecting the current target) only, I found that the perceptual cues would oftentimes be equally applicable to precognition (selecting a future target--usually the next one). Therefore, making a correct selection required doing two things; first, finding the correct "pattern" of buttons that would be randomly selected by the machine (typically the pattern consisted of two to three buttons) and second, associating a time component

with the buttons in that pattern. Stated differently, the same cues discussed above held equally well for precognition or for clairvoyance-- so the problem of making a selection was compounded by the additional difficulty of having to determine whether a perceptual cue was associated with the button that had already been selected by the machine or the button that would be selected in the next or even subsequent trial. I definitely felt that if I could consistently separate clairvoyant from precognitive dimensions of identical cues, that I could substantially increase the accuracy of overall scores.

The cues were not always consistent in their presence and meaning. For example, I might be obtaining good results with the use of tension/ vector cues and then find them becoming ambiguous, with a commensurate decline in my score. Then I would rely more heavily upon other cues. Or, the cues might work well for clairvoyant perceptions for a while but then shift to operate for precognition--then I would have to "recalibrate" myself to the cue mechanisms. So, it was a fluid, dynamic perceptual process which required flexibility and patience. Highly significant scores and perceptions seemed to go in spurts of ten trials or so, then I would fall back to a chance level until I could resynchronize myself with the machine and the character of my perceptual cues.

This gives the guy several chances to be "right" on a given button - if it comes up the next few times. The ones "miss" in this frame - the prediction of which of the next few trials will be a hit. can

talk to self into anything.

I tend to agree with the notion that it might be more appropriate to call these processes "extraconceptual perception" rather than "extra-sensory perception." The perceptual cues were definitely present and they had sensory dimensions even though they do not fit into our traditional sensory categories. Just "where" and "how" these sensory cues were present is not clear to me--but these are essentially conceptual rather than sensory issues.

3. Problems in Perceptual Translation

A basic problem in using the ESP machine was not so much the obtaining of perceptual data as the translating of those data into sufficient information to allow the action of selecting the correct button. While the act itself is so simple as to be trivial, the information processes (gathering, filtering, dynamically translating) underlying that act seemed to me very substantial. It is within this unseen and unrecorded portion of the ESP testing process that most of the "action" takes place. From this vantage point I would like to suggest two impediments that might partially account for relatively low scores.

First, I am still not fluent in the "language" of extrasensory perceptions--analogously, it is like hearing many separate commands in Russian (or another unfamiliar language), each time spoken in slightly different ways and with different intonations and inflections. The call for action may be clearly heard but the translation of that command into operational reality is an imprecise process until the language can be better understood.

Second is the problem created by shifting back and forth between rational and intuitive knowledge processes during the course of the experiment. In selecting a single button I would use intuitive knowledge

processes for perception and oftentimes, rational or semirational knowledge processes to interpret those perceptions. This is not to say that the rational component is absolutely necessary, but it did seem to be useful for me. In any event, since the experiment covers thousands of trials (button selections) it required thousands of translations from one knowledge mode to another. Although the rational mode did seem helpful for interpretation, it was also "costly" (i.e., by shifting to a rational mode, I could be thrown slightly off-balance in maintaining contact with the subtle and delicate intuitive processes--thereby introducing an additional element of ambiguity and error).

Related to the problem of differential knowledge processes is the problem of having to translate between states of consciousness in order to act upon extrasensory perceptions. LeShan* analyzed the experiential properties of what he has termed Clairvoyant Reality and found that while certain events (such as telepathy, precognition, and clairvoyance) are "normal" to this reality, certain other events (such as being able to take directed action toward a goal) are "paranormal." For me this was manifested experientially as the feeling that when I obtain extrasensory perceptions, I am so much a part of, and immersed in the Clairvoyant Reality that in order to act, I must causally separate myself from the Clairvoyant Reality and enter the dualistic, subject/object Reality that LeShan terms "Sensory Reality." Encouragingly, the "pattern recognition" process seemed to offer a means of both perception and action, which did not require the same degree of transfer between these subtly different states of consciousness.

* Lawrence LeShan, The Medium, The Mystic, and the Physicist (Viking Press, New York, 1974).

The preceding points suggest that one difficulty in testing and assessing extrasensory perception may be the apparent need to translate it into an output that is not isomorphic with the perceptions themselves-- a person must translate the perceptual "language" to a familiar form, across rational and intuitive dimensions, and relatedly, from one state of awareness to another. Is it possible, then, that our means for testing ESP may not be highly congruent with the nature of the phenomenon, and this may inherently reduce the significance of the test results that can be obtained?

4. Two Views of the ESP Process

I suspect that, to an external observer, my work with the ESP machine might appear as fairly consistent scoring slightly above chance--the logical inference could then be made that a small amount of extrasensory perception was mixed with a substantial amount of pure guessing. While the scoring data may support this inference, my awareness of the input process does not. Consider the following: on the first run, a person could get six "hits" out of twenty-five by pushing buttons at random; then on the second run, he could get six "hits" out of twenty-five by using extrasensory perception. To the statistician who looks only at the output, the scores are identical--they are no more than would occur by chance--and the logical inference would be that the input processes were identical or at least very similar. However alike they might appear externally, internally they could feel like quite different runs. In the second instance, the chance level of scoring would be the result of an imperfect but operative extrasensory perception process. Obviously, then, measurement of ESP by statistical output alone obscures the nature and extent of the extrasensory input. A relatively modest score on the ESP machine can--I think--substantially understate the amount of learning and perceptual

development that actually occurs. The foregoing is consistent with my impression that my scores, though statistically significant, still did not reflect the actual amount of learning that had occurred.

A high level of motivation is essential for the successful learning of the 1000 buttons and indicators of this device. The primary motivation is the desire to understand the device and its operation. This is a natural result of the high level of interest and curiosity that is characteristic of the individual. The second motivation is the desire to learn the device in order to be able to operate it. This is a result of the high level of responsibility that is placed on the individual.

The third motivation is the desire to learn the device in order to be able to teach it to others. This is a result of the high level of responsibility that is placed on the individual. The fourth motivation is the desire to learn the device in order to be able to use it in a professional capacity. This is a result of the high level of responsibility that is placed on the individual.

5. Supportive Mind Set

There emerged, after a time, what seemed to be a series of pre-conditions to good performance in terms of mind set. These were:

- A high level of motivation seemed essential. The task of pushing one of four buttons over thousands of trials could be rather boring--enough to allow one's attention to wander. With each trial, it was necessary to have a high level of motivation to ensure adequate levels of concentration and focused attention.
- Although motivation, concentration, and attention were important, it was also necessary not to be too concerned with the success or failure associated with each selection. If I became "attached" to the outcome of a previous trial, whether a success or a failure, it could divert a significant amount of attention from the present trial. Therefore, each trial must be separate/fresh/clear/unconditioned by the actual success or failure of previous trials and separate from the imagined successes or failures of upcoming trials.
- A relatively stable, undisturbed emotional state also seems important. I noticed the most substantial fluctuation in my scores when I was emotionally stressed (angry, hassled, and so on).
- Feeling rested physically also seemed important. This was particularly true if I were to work with the machine for an hour or two--as this required a substantial amount of energy.
- A positive attitude--a feeling that I could do well and could always score at least at the chance level--was also important. A corollary to this was that I found I did better when I "always liked myself" even if I did poorly. Self-deprecation seemed to be a sure way of rapidly diminishing the accuracy of the perceptual processes.

6. The Environment

There were attributes of the surrounding environment that seemed to enhance the accuracy of my selections. The more significant factors seemed to be the following:

• It was helpful to have a relatively quiet working environment. Or, if there were noises, to have them of a sort--fairly constant ones that remained in the background--that could be readily filtered out of my consciousness. My impression was that external sensory information--particularly sounds--could readily overload/override subtle and delicate internal sensory information.

- It also seemed to help to have low light levels--I would always turn out the overhead lights in the testing room. I experimented with closing my eyes to further reduce external sensory stimulation and I found that this would increase the sensitivity of sensory cues, but this increase in sensitivity was offset by a lack of visually based feedback to verify the accuracy of the selections. As a consequence, I chose to keep my eyes open.
- I found it essential to work with the ESP machine by sitting somewhat above it so that I could look down on the face of the machine. For some reason, perceptual discrimination seemed much more difficult when I would sit at a lower level which placed the buttons in a plane more nearly horizontal to my face and upper body.

7. Transferability of Processes

The perceptual learning gained in this experiment seemed generally transferable to other situations where I might use ESP abilities, in particular, telepathy, precognition, and clairvoyance. The inference is that a process or faculty is being developed which has numerous applications in other situations which would rely upon ESP. Analogously, just as jogging could exercise muscles to make a person more adept at playing football, dancing, swimming, and the like, the use and development of these "psychic" muscles seems to have some degree of transference to other situations.

8. Conclusions

I found the experiment to be a very substantial learning experience in which, I feel, I learned much more than was reflected in the scores. It allowed me to begin to identify an ability which I presume was largely latent within--never having had a prior opportunity for overt expression. Finally, it suggests to me that this must be a common ability among many people that they simply do not recognize--primarily because they have never had the opportunity to explore it as a legitimate and "real" phenomenon.